IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

First named inventor: Stephane Coulombe	Confirmation No.: 8150
Serial No.: 10/765,576	Group Art Unit: 2456
Filed: January 26, 2004	Examiner: Michael Young Won

Title: Media Adaptation Determination for Wireless Terminals

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BRIEF FOR APPLICANTS

Sir:

This is a brief for an appeal from a final Office Action mailed March 24, 2010, and a subsequent Notice of Panel Decision from Pre-Appeal Brief Review, mailed on November 22, 2010, maintaining the rejections in response to a Response filed on January 19, 2010 and a Pre-Appeal Brief filed on September 24, 2010.

For all of the reasons discussed below, it is the belief of the undersigned that the claims of the application do distinguish the invention from the art relied on by the Examiner.

In the event that a proper request for an extension of time has not been requested, the Commissioner is hereby authorized to consider this a Petition for a conditional extension of time in order to maintain the pendency of the patent application so as to submit this response, and is also authorized to deduct any fee deficiency associated with the petition as well as any other fee deficiency, including fees related to extra claims, that has been inadvertently omitted, to deposit account number 230442.

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I.   **REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))**

The real party in interest in this appeal is Nokia Corporation, a corporation organized under the laws of Finland.

II.   **RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c)(1)(ii))**

There are no related appeals or interferences.

III.   **STATUS OF CLAIMS (37 C.F.R. § 41.37(c)(1)(iii))**

The Final Office Action of March 24, 2010 (hereinafter the "Final Office Action") examined claims 1-21, 24, 27, 30, 33, 36-38, 41, 42 and 48, and rejected same. For this appeal, the claims are unchanged. The independent claims are 1, 11, 12, 13, 21, 24, 27, 30, 33, 38 and 48. Claims 1-21, 24, 27, 30, 33, 36-38, 41, 42 and 48 are rejected only under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al. (U.S. 7,133,925, hereinafter "Mukherjee") in view of Maes (U.S. Patent 6,970,935).

IV.   **STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))**

Applicants filed a Pre-Appeal Brief on September 24, 2010 in response to the Final Office Action. No claims were amended after the Final Office Action.

V.   **SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))**

The independent claims involved in the appeal are claims 1, 11, 12, 13, 21, 24, 27, 30, 33, 38 and 48, and a concise summary of the subject matter as claimed in the independent claims involved in the appeal is as follows:

The independent claims recite new techniques for transcoding multimedia messages, where the multimedia message contains inserted media characteristics sufficient in detail to enable determining whether the multimedia message should be transcoded to accommodate multimedia capabilities of a receiving terminal. In operation, a sending terminal 21 provides the multimedia message having the inserted media characteristics to a messaging server 22, as shown Figure 2 of the application. The messaging server 22 reads the inserted media characteristics of the multimedia message, decides whether the multimedia message should be transcoded based only on a comparison of the inserted media characteristics of the multimedia message and actual or assumed multimedia capabilities of the receiving

terminal, and provides an adapted multimedia message to the receiving terminal 25 based on the comparison.

As stated in the application as filed, page 1, lines 3-8, the present invention relates to the field of the media adaptation (transcoding) of such a multimedia message, where one skilled in the art would appreciate that such multimedia messages form part of Multimedia Messaging Service (MMS), and Session Initiation Protocol (SIP), as standard ways to send messages that include multimedia content to and from mobile phones, which extended the core SMS (Short Message Service) capability which only allowed exchange of text messages up to 160 characters in length.

In the prior art, a multimedia message being sent from a sending terminal to a receiving terminal may contain one or more media components, such as a JPEG image, and the messaging server had to open and analyze each media component of the multimedia message in view of the capabilities of the receiving terminal. *See* Application as filed, page 1, line 10-page 2, line 19. An example of such a prior art system is also shown in Figure 1, which is described from page 9, line 16-page 10, line 5 of the application as filed. In contrast, it is an advantage of the present invention that a messaging server can determine whether transcoding is needed for a message intended for a terminal without having to open and examine each media component of the message. *See* Application as filed, page 2, lines 15-19.

Independent claims 1 and 13 relate to a first aspect of the invention.

Independent claim 1 is directed to a method by which a multimedia message is transcoded en route from a sending terminal (21) via a messaging server (22) to a receiving terminal (25). *See* Application as filed, Figure 2. In the method, a user agent of the sending terminal (21) inserts into the multimedia message, media characteristics of the multimedia message sufficient in detail to enable determining whether the multimedia message should be transcoded to accommodate multimedia capabilities of the receiving terminal (25). *See* Application as filed, Figure 2; Figure 3, Step 31; page 22, lines 1-6; page 10, lines 10-12. The media characteristics of the multimedia message comprise at least one of a number of frames or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The method

also comprises the messaging server (22) reading the media characteristics of the multimedia message and deciding whether the multimedia message should be transcoded based only on a comparison of the inserted media characteristics of the multimedia message and actual or assumed multimedia capabilities of the receiving terminal (25). *See* Application as filed, Figure 2; Figure 3, Step 33; page 22, lines 9-14; page 10, lines 13-32.

Independent claim 13 is directed to a system. The system comprises a sending terminal (21) and a messaging server (22). *See* Application as filed, Figure 2. The sending terminal (21) is configured to insert into a multimedia message for a receiving terminal (25), media characteristics of the multimedia message sufficient in detail to enable a messaging terminal to determine whether the multimedia message should be transcoded based only on a comparison of actual or assumed multimedia capabilities. *See* Application as filed, Figure 2; page 10, lines 10-12, 26-28. The media characteristics of the multimedia message comprise at least one of a number of frames or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The messaging server (22) is configured to read the media characteristics of the multimedia message and decide whether the multimedia message should be transcoded based only on a comparison of the media characteristics and actual or assumed multimedia capabilities of the receiving terminal (25). *See* Application as filed, Figure 2; Figure 3, Step 33; page 22, lines 9-14; page 10, lines 13-32.

Independent claims 11, 21, 27 and 30 relate to a second aspect of the invention.

Independent claim 11 is directed to a sending terminal (21). *See* Application as filed, Figure 2. The sending terminal (21) comprises a processor (21a) configured to determine media characteristics of a multimedia message sufficient in detail to enable a messaging terminal to determine whether the multimedia message should be transcoded based only on a comparison of actual or assumed multimedia capabilities. *See* Application as filed, Figure 2; page 10, lines 6-12, 26-28. The media characteristics of the multimedia message comprise at least one of a number of frames or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the

media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The processor (21a) of the sending terminal (21) is further configured to insert the media characteristics of the multimedia message. *See* Application as filed, Figure 2; page 10, lines 6-9.

Independent claim 21 is directed to a method for use by a sending terminal (21). *See* Application as filed, Figures 2, 3. The method comprises determining media characteristics for media components of a multimedia message intended for a receiving terminal (25). *See* Application as filed, Figure 2; page 10, lines 6-12. The media characteristics of the multimedia message are sufficient in detail to enable determining whether the multimedia message should be transcoded to accommodate multimedia capabilities of the receiving terminal (25). *See* Application as filed, Figure 2; page 10, lines 10-12, 26-28. The media characteristics of the multimedia message comprise at least one of a number of frames or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The method further comprises inserting (31) the media characteristics of the multimedia message into the multimedia message. *See* Application as filed, Figure 3; page 10, lines 6-9.

Independent claim 27 is directed to an apparatus (21) for transmitting a multimedia message. *See* Application as filed, Figure 2. The apparatus (21) comprises a processor (21a) configured to determine media characteristics for a media component of the multimedia message. *See* Application as filed, Figure 2; page 10, lines 6-12. The media characteristics of the multimedia message comprise at least one of a number of frames, a frame rate of visual content or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The processor (21a) of the apparatus (21) is further configured to insert the media characteristics of the multimedia message into the multimedia message. *See* Application as filed, Figure 2; page 10, lines 6-9.

Independent claim 30 is directed to a method for transmitting a multimedia message. The method comprises determining media characteristics for a media component of the multimedia message. *See* Application as filed, page 10, lines 6-12. The media characteristics of the multimedia message comprise at least one of a number of frames, a frame rate of visual content or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The method further comprises inserting (31) the media characteristics of the multimedia message into the multimedia message. *See* Application as filed, Figure 3; page 10, lines 6-9.

Independent claims 12, 24, 33, 38 and 48 relate to a third aspect of the invention.

Independent claim 12 is directed to a messaging server (22). *See* Application as filed, Figure 2. The messaging server (22) comprises a processor (22a) configured to obtain media characteristics of a multimedia message that are inserted into the multimedia message intended for a receiving terminal (25). *See* Application as filed, Figure 2; page 10, lines 24-28. The media characteristics of the multimedia message comprise at least one of a number of frames or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The processor (22a) of the messaging server (22) is further configured to decide whether the multimedia message should be transcoded based only on comparing the media characteristics of the multimedia message with actual or assumed multimedia capabilities of the receiving terminal (25). *See* Application as filed, Figure 2; page 10, lines 25-32.

Independent claim 24 is directed to a method for use by a messaging server (22). *See* Application as filed, Figures 2, 3. The method comprises obtaining (33) media characteristics of a multimedia message that are inserted into the multimedia message intended for a receiving terminal (25). *See* Application as filed, Figure 2; Figure 3, page 10, lines 24-28. The media characteristics of the multimedia message comprise at least one of a number of frames, a frame rate of visual content or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12.

The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The method further comprises deciding (33) whether the multimedia message should be transcoded based only on a comparison of the media characteristics of the multimedia message with actual or assumed multimedia capabilities of the receiving terminal (25). *See* Application as filed, Figure 2; Figure 3; page 10, lines 25-32.

Independent claim 33 is directed to an apparatus (22) for processing a multimedia message. *See* Application as filed, Figure 2. The apparatus (22) comprises a processor (22a) configured to receive media characteristics of a media component of the multimedia message in a field of the multimedia message. *See* Application as filed, Figure 2; page 10, lines 24-28. The media characteristics of the multimedia message comprise at least one of a number of frames or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The processor (22a) of the apparatus (22) is further configured to determine whether the multimedia message should be transcoded based at least in part on a comparison of the received media characteristics of the multimedia message and actual or assumed multimedia capabilities of a receiving terminal (25). *See* Application as filed, Figure 2; page 10, lines 25-32.

Independent claim 38 is directed to a method for processing a multimedia message. The method comprises receiving (33) media characteristics of a media component of the multimedia message in a field of the multimedia message. *See* Application as filed, Figure 3, page 10, lines 24-28. The media characteristics of the multimedia message comprise at least one of a number of frames or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The method further comprises determining (33) whether the multimedia message should be transcoded based at least in part on a comparison of the received media characteristics of the multimedia message and actual or assumed multimedia

capabilities of a receiving terminal (25). *See* Application as filed, Figure 2; Figure 3; page 10, lines 25-32.

Independent claim 48 is directed to an apparatus (22). *See* Application as filed, Figure 2. The apparatus (22) comprises means (22a) for receiving media characteristics of a media component of the multimedia message in a field of the multimedia message. *See* Application as filed, Figure 2, page 10, lines 24-28. The media characteristics of the multimedia message comprise at least one of a number of frames or a sampling rate of audio content. *See* Application as filed, page 4, lines 9-12. The multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message. *See* Application as filed, page 12, lines 7-10. The apparatus (22) further comprises means (22a) for determining whether the multimedia message should be transcoded based at least in part on a comparison of the received media characteristics of the multimedia message and actual or assumed multimedia capabilities of a receiving terminal (25). *See* Application as filed, Figure 2, page 10, lines 25-32.

VI.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))

Independent claims 1, 11, 12, 13, 21, 24, 27, 30, 33, 38 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee in view of Maes.

Dependent claims 2-10, 14-20, 36, 37, 41 and 42 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee in view of Maes.

VII.   ARGUMENT (37 C.F.R. § 41.37(c)(1)(vii))

A. Independent Claims 1 and 13 Are Not Obvious Under 35 U.S.C. 103(a) In View of Mukherjee and Maes

Independent claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being obvious over a new prior art combination of Mukherjee (US 7,133,925) in view of Maes.

MPEP § 2111 provides that, during patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification," citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ 2d 1321 (Fed. Cir. 2005) (*en banc*). As set forth in the *Phillips* case, terms used in claims are to be

given a meaning to a person of ordinary skill in the art who is deemed to have read the terms in the context of the entire patent. In addition, MPEP § 2111.01 provides that, during examination, the claims must be interpreted as broadly as their terms reasonably allow, citing *In re American Academy of Science Tech Center, 367 F.3d 1359, 1370, 70* USPQ 2d 1827, 1834 (Fed. Cir. 2004). It is respectfully submitted that terms or limitation used in claims, including "multimedia message," must be reasonably interpreted in view of this standard set forth in MPEP §2111 and §2111.01, which is consistent with the *Phillips* and *In re American Academy* cases.

It is respectfully submitted that with the aforementioned backdrop, the properness of the obviousness rejection based on the prior art combination of the claimed embodiment is evaluated.

The obviousness rejection is respectfully traversed because the prior art combination of Mukherjee and Maes does not disclose, teach or suggest a technique for transcoding a multimedia message containing inserted media characteristics sufficient in detail to enable determining whether the multimedia message should be transcoded to accommodate multimedia capabilities of a receiving terminal, as claimed. The prior art particularly does not disclose where the media characteristics of the multimedia message comprise at least one of a number of frames or a sampling rate of audio content, the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message, as also claimed. Instead, both Mukherjee and Maes relate to processing multimedia content such as image, video or audio. Neither Mukherjee nor Maes disclose anything about processing a multimedia message, as claimed, and as this term would be understood by a person having ordinary skill in the art.

Foremost, Mukherjee discloses a technique for scalable encoded media data delivery, taking the form of a scalable encoded bit stream that can have more than one kind of scalability. *See* Mukherjee, column 4, lines 47-59. In effect, Mukherjee's technique merely relates to transcoding a single piece of multimedia content. Mukherjee does not disclose, teach or suggest that its technique relates in any way to a multimedia message, as claimed, as the term "multimedia message" is known in the art, and as the term "multimedia message" would be reasonably interpreted when given a meaning by a person of ordinary skill in the art who is deemed to have read the term "multimedia message" in the context of the entire patent application.

By way of example, independent claim 1 recites a limitation stating: "inserting, into the multimedia message, media characteristics of the multimedia message sufficient in detail to enable determining whether the multimedia message should be transcoded to accommodate multimedia capabilities of the receiving terminal". The Office on page 3 of the Final Office Action cites Mukherjee, column 3, lines 42-52 as disclosing this limitation, although Applicants note that the Office states that Mukherjee discloses "multimedia data", not a "multimedia message". This passage of Mukherjee discloses a system of delivery of encoded scalable media data having a media source that provides scalable encoded media data in a format including first and second portions, where the first portion corresponds to non-media type specific scalability attributes of original encoded media data and data structure information of the second portion, and where the second portion corresponds to the original scalable encoded media data arranged in a non-media type specific indexable data structure having at least one dimension. In effect, the media source merely provides a single piece of multimedia content in some prearranged format. However, it is respectfully submitted that one skilled in the art would appreciate that Mukherjee, column 3, lines 42-52, does not disclose that the encoded scalable media data, the original encoded media data or the original scalable encoded media data is, or forms part of, a multimedia message, as claimed, as the term "multimedia message" is known in the art, and as the term "multimedia message" would be reasonably interpreted when given a meaning by a person of ordinary skill in the art who is deemed to have read the term "multimedia message" in the context of the entire patent application.

Further, by way of example, independent claim 1 also recites a limitation stating: "deciding whether the multimedia message should be transcoded based only on a comparison of the inserted media characteristics of the multimedia message and actual or assumed multimedia capabilities of the receiving terminal". The Office asserts on page 3 of the Final Office Action that this limitation is disclosed by Mukherjee, column 3, lines 56-62. This section of Mukherjee discloses a system of delivery of encoded scalable media data having a transcoder that transcodes a formatted original scalable encoded media data prior to delivery to a media destination to generate a scaled encoded media data, based on matching the scalability attributes and using the data structure information. In effect, Mukherjee's transcoder merely transcodes the single piece of multimedia content in some

prearranged transcoding format. However, consistent with that set forth immediately above, it is respectfully submitted that one skilled in the art would appreciate that Mukherjee, column 3, lines 56-62, does not disclose that the transcoding of the formatted original scalable encoded media data prior to delivery to the media destination in any way relates to a multimedia message, as claimed, as the term "multimedia message" is known in the art, and as the term "multimedia message" would be reasonably interpreted when given a meaning by a person of ordinary skill in the art who is deemed to have read the term "multimedia message" in the context of the entire patent application.

The Office further states in the Response to Arguments section on page 31 of the Final Office Action that Mukherjee does not disclose multimedia messages, but it would have been obvious to implement "any format of message". Applicants respectfully disagree because in asserting that "the subjective interpretation of the data does not patentably distinguish the claimed invention", the Office disregards the fact that a person of ordinary skill in the art would find a clear distinction between multimedia data and a multimedia message, as Applicants have discussed above and is further discussed, for example, in the Application as filed, from page 1, line 2 to page 2, line 19. A person of ordinary skill in the art would not find it obvious to simply substitute "media data" and the invention of Mukherjee with a "multimedia message" in order to arrive at the invention of claim 1 because of the distinctions between the two.

For these reasons, it is respectfully submitted that Mukherjee does not disclose, teach or suggest these limitations relating to multimedia messages for which it is being cited by the Office.

Furthermore, by way of example, claim 1 also recites a limitation stating: "wherein the media characteristics of the multimedia message comprises at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message." The Office recognizes that Mukherjee does not disclose this limitation, citing Maes on page 3 of the Office Action to make up for this deficiency, including column 16, lines 3-11, and column 17, lines 22-24, 26-29 and 31-42 of the reference.

Maes discloses a technique for providing conversational networking for implementing distributed conversational applications over a computer network, based in part on a suitably defined conversational coding, transport and control protocols. *See* Maes, column 5, lines 28-38. The conversational coding protocols may include a preferred RECOVC.xxx format that enables transmission of different segments of speech and comprises a file header which defines information regarding a compression scheme, the size of the file, and regarding transformation of the speech signal, as disclosed from column 15, line 55 to column 16, line 11. However, it is respectfully submitted that Maes does not disclose, teach or suggest that the conversational coding protocols or the preferred RECOVC.xxx format that enables transmission of different segments of speech in any way relates to a multimedia message, as claimed. For example, Maes discloses in column 7, lines 22-24 that a speech segment header will specify a number of frames; discloses in column 17, lines 26-29 that a silent segment header will specify a silent number of frames; and discloses in column 17, lines 31-42 that a number of frames field comprises a value that indicates a total number of frames. However, it is respectfully submitted that one skilled in the art would appreciate that Maes, column 17, lines 22-24, 26-29 and 31-42, does not disclose that the speech segment header or the information about the number of frames, etc., in any way relates to a multimedia message, as claimed, as the term "multimedia message" is known in the art, and as the term "multimedia message" would be reasonably interpreted when given a meaning by a person of ordinary skill in the art who is deemed to have read the term "multimedia message" in the context of the entire patent application.

For these reasons, it is respectfully submitted that Maes does not disclose, teach or suggest this limitation for which it is being cited by the Office.

Furthermore still, even if it is assumed for the sake of argument that Mukherjee and Maes did disclose the limitations for which they are being cited, the proposed combination thereof is still not proper. For example, the Office takes the position on page 4 of the Final Office Action that it would have been obvious to a person of ordinary skilled in the art at the time of the invention was made to modify the system of Mukherjee in view of Maes so that the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message

are inserted into a field in the header portion of the multimedia message," as claimed. In effect, the Office is trying to modify the format of Mukherjee's scalable encoded media data, in particular, the modification of the first portion corresponding to the non-media type specific scalability attributes of the original encoded media data and data structure information of the second portion. The Office's reasoning states that: "One would be motivated to do so because Maes teaches that such implementation which is generally known as a RECOVC file format that allows for real-time distributed conversational interactions (see column 15, lines 60-65). *See* Final Office Action, page 4 (emphasis added). The reasoning in the Final Office Action is trying to justify the modification of the format of Mukherjee's scalable encoded media data, i.e. the modification of the first portion corresponding to the non-media type specific scalability attributes of the original encoded media data and data structure information of the second portion. However, it is respectfully submitted that it is not clear how Mukherjee's scalable encoded media data could be so modified and still work within the context of Mukherjee's overall disclosure, including its transcoding technique. In addition, nothing on the record suggests a basis for modifying that disclosed in Mukherjee's scalable encoded media data, i.e. the modification of the first portion corresponding to the non-media type specific scalability attributes of the original encoded media data and data structure information of the second portion, in order to achieve some kind of "real-time distributed conversational interactions" as proposed in the reasoning of the Final Office Action.

For all these reasons, it is respectfully submitted that the proposed prior art combination does not disclose, teach or suggest the claimed embodiment of claim 1, as well as claim 13.

In view of all of the aforementioned, it is respectfully submitted that the prior art combination of Mukherjee in view of Maes is not proper and does not disclose, teach or suggest the inventions of claim 1 and 13.

B. Independent Claims 11, 21, 27 and 30 Are Not Obvious Under 35 U.S.C. 103(a) In View of Mukherjee and Maes

Independent claims 11, 21, 27 and 30 recite limitations and features similar to those found in claims 1 and 13, and are rejected based on similar grounds.

Therefore, for the reasons set forth above with respect to claims 1 and 13, Applicants respectfully submit that the claimed inventions of claims 11, 21, 27 and 30 are not obvious in view of Mukherjee and Maes.

C. Independent Claims 12, 24, 33, 38 and 48 Are Not Obvious Under 35 U.S.C. 103(a) In View of Mukherjee and Maes

Independent claims 12, 24, 33, 38 and 48 recite limitations and features similar to those found in claims 1 and 13, and are rejected based on similar grounds.

Therefore, for the reasons set forth above with respect to claims 1 and 13, Applicants respectfully submit that the claimed inventions of claims 12, 24, 33, 38 and 48 are not obvious in view of Mukherjee and Maes.

D. Dependent Claims 2-10, 14-20, 36, 37, 41 and 42 Are Not Obvious Under 35 U.S.C. 103(a) In View of Mukherjee and Maes

Dependent claims 2-10, 14-20, 36, 37, 41 and 42 are dependent on the independent claims, which as discussed above, are all non-obvious in view of the cited references, Mukherjee and Maes. Therefore, at least in view of their dependency on these non-obvious independent claims, it is respectfully submitted that dependent claims 2-10, 14-20, 36, 37, 41 and 42 are non-obvious over the prior art and are in allowable form.

Conclusion

For the reasons discussed above, Applicants respectfully submit that the rejections of the Final Office Action have been shown to be inapplicable, and respectfully requests that the Board reverses the rejections to pending claims 1-21, 24, 27, 30, 33, 36-38, 41, 42 and 48.

Respectfully submitted,

December 22, 2010_____

Date

/Steven T. Cooper/ _____

Steven T. Cooper
Attorney for Applicants
Registration No. 65,716

WARE, FRESSOLA, VAN DER SLUYS
& ADOLPHSON LLP
755 Main Street, P.O. Box 224
Monroe, CT 06468-0224

Tel: (203) 261-1234

VIII. CLAIMS APPENDIX 37 C.F.R. §41.37(c)(1)(viii)

1. (Previously presented) A method by which a multimedia message is transcoded *en route* from a sending terminal via a messaging server to a receiving terminal, the method comprising:

   a user agent of the sending terminal inserting, into the multimedia message, media characteristics of the multimedia message sufficient in detail to enable determining whether the multimedia message should be transcoded to accommodate multimedia capabilities of the receiving terminal, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

   the messaging server reading the media characteristics of the multimedia message and deciding whether the multimedia message should be transcoded based only on a comparison of the inserted media characteristics of the multimedia message and actual or assumed multimedia capabilities of the receiving terminal.

2. (Previously presented) A method as in claim 1, wherein the messaging server sends the multimedia message to a transcoding server if transcoding is needed, and the transcoding server uses the inserted media characteristics of the multimedia message to itself decide if transcoding is needed.

3. (Previously presented) A method as in claim 1, wherein the messaging server sends the multimedia message to a transcoding server if transcoding is needed,

and the transcoding server uses the inserted media characteristics of the multimedia message to itself decide which parts of the multimedia message need transcoding.

4. (Previously presented) A method as in claim 1, wherein the messaging server determines, from the inserted media characteristics of the multimedia message, which parts of the multimedia message need transcoding and sends the multimedia message to a transcoding server if transcoding is needed for any message part, and includes in the multimedia message an indication of which parts of the multimedia message need transcoding.

5. (Previously presented) A method as in claim 1, wherein the messaging server determines, from the inserted media characteristics of the multimedia message, which parts of the multimedia message need transcoding and sends only those message parts requiring transcoding to a transcoding server.

6. (Previously presented) A method as in claim 1, wherein the transcoding is performed based on a comparison of the inserted media characteristics and the actual or assumed multimedia capabilities of the receiving terminal, without performing an analysis of the multimedia message to determine whether transcoding is needed.

7. (Previously presented) A method as in claim 6, wherein the transcoding is performed without also performing even an analysis to determine which parts of the multimedia message need to be transcoded.

8. (Previously presented) A method as in claim 1, wherein the user agent inserts the media characteristics of the multimedia message into the field in the header of the multimedia message.

9. (Previously presented) A method as in claim 1, wherein the user agent inserts the media characteristics of the multimedia message into the field in the body of the multimedia message.

10. (Previously presented) A method as in claim 1, wherein the media characteristics of the multimedia message include image and video resolution, or number of frames and frame rate of visual content, or sampling rate of audio content.

11. (Previously presented) A sending terminal, comprising a processor configured to:

determine media characteristics of a multimedia message sufficient in detail to enable a messaging terminal to determine whether the multimedia message should be transcoded based only on a comparison of actual or assumed multimedia capabilities of a receiving terminal and the inserted media characteristics, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

insert the media characteristics of the multimedia message into the multimedia message.

12. (Previously presented) A messaging server, comprising a processor configured to:

obtain media characteristics of a multimedia message that are inserted into the multimedia message intended for a receiving terminal, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

decide whether the multimedia message should be transcoded based only on comparing the media characteristics of the multimedia message with actual or assumed multimedia capabilities of the receiving terminal.

13. (Previously presented) A system, comprising a sending terminal and a messaging server, wherein:

the sending terminal is configured to insert, into a multimedia message for a receiving terminal, media characteristics of the multimedia message sufficient in detail to enable determining whether the multimedia message should be transcoded to accommodate multimedia capabilities of the receiving terminal, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

the messaging server is configured to read the media characteristics of the multimedia message and decide whether the multimedia message should be transcoded based only on a comparison of the media characteristics and actual or assumed multimedia capabilities of the receiving terminal.

14. (Previously presented) A system as in claim 13, wherein the messaging server is further configured to transcode the multimedia message based on the inserted media characteristics and the actual or assumed multimedia capabilities of the receiving terminal, without performing an analysis of the multimedia message to determine media characteristics of the multimedia message relevant to deciding whether transcoding is needed.

15. (Previously presented) A system as in claim 13, wherein the messaging server is further configured to send the multimedia message to a transcoding server if transcoding is needed, and the transcoding server is configured to use the inserted media characteristics to decide if transcoding is needed.

16. (Previously presented) A system as in claim 13, wherein the messaging server is further configured to send the multimedia message to a transcoding server if transcoding is needed, and the transcoding server is configured to use the inserted media characteristics to decide which parts of the message need transcoding.

17. (Previously presented) A system as in claim 13, wherein the messaging server is further configured to determine, from the inserted media characteristics, which parts of the multimedia message need transcoding and to send the multimedia message to a transcoding server if transcoding is needed for any message part, and to include in the multimedia message an indication of which parts of the multimedia message need transcoding.

18. (Previously presented) A system as in claim 13, further comprising a transcoding engine for transcoding the multimedia message, wherein the transcoding is performed based on a comparison of the inserted media characteristics and the actual or assumed multimedia capabilities of the receiving terminal, without performing an analysis of the multimedia message to determine whether transcoding is needed.

19. (Previously presented) A computer program product comprising: a computer readable storage structure embodying computer program code thereon for execution by a computer processor in a sending terminal, wherein said computer program code includes instructions for performing the method of claim 21.

20. (Previously presented) A computer program product comprising: a computer readable storage structure embodying computer program code thereon for execution by a computer processor in a messaging server, wherein said computer program code includes instructions for performing the method of claim 24.

21. (Previously presented) A method for use by a sending terminal comprising:

determining media characteristics for media components of a multimedia message intended for a receiving terminal, wherein the media characteristics of the multimedia message are sufficient in detail to enable determining whether the multimedia message should be transcoded to accommodate multimedia capabilities of the receiving terminal, further wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

inserting the media characteristics of the multimedia message into the multimedia message.

22. (Canceled)

23. (Canceled)

24. (Previously presented) A method for use by a messaging server comprising:

obtaining media characteristics of the multimedia message that are inserted into the multimedia message intended for a receiving terminal, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, a frame rate of visual content, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

deciding whether the multimedia message should be transcoded based only on a comparison of the inserted media characteristics and actual or assumed multimedia capabilities of the receiving terminal.

25. (Canceled)

26. (Canceled)

27. (Previously presented) An apparatus for transmitting a multimedia message, the apparatus comprising a processor configured to:

determine media characteristics for a media component of the multimedia message, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, a frame rate of visual content, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

insert the media characteristics of the multimedia message into the multimedia message.

28. (Canceled)

29. (Canceled)

30. (Previously presented) A method for transmitting a multimedia message, the method comprising:

determining media characteristics for a media component of the multimedia message, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

inserting the media characteristics of the multimedia message in the multimedia message.

31. (Canceled)

32. (Canceled)

33. (Previously presented) An apparatus for processing a multimedia message, the apparatus comprising a processor configured to:

receive media characteristics of a media component of the multimedia message in a field of the multimedia message, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

determine whether the multimedia message should be transcoded based at least in part on a comparison of the received media characteristics of the multimedia message and actual or assumed multimedia capabilities of a receiving terminal.

34. (Canceled)

35. (Canceled)

36. (Previously presented) An apparatus as in claim 33, wherein the processor is further configured to:

determine media components of the multimedia message which need transcoding based at least on the respective received media characteristics; and

transmit at least a part of the multimedia message to a transcoding server.

37. (Previously presented) An apparatus as in claim 33, wherein the processor is further configured to:

transcode a media component of the message based at least on the actual or assumed multimedia capabilities of the receiving terminal.

38. (Previously presented) A method for processing a multimedia message, the method comprising:

receiving media characteristics of a media component of the multimedia message in a field of the multimedia message, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

determining whether the multimedia message should be transcoded based at least in part on a comparison of the received media characteristics of the multimedia message and actual or assumed multimedia capabilities of a receiving terminal.

39. (Canceled)

40. (Canceled)

41. (Previously presented) A method as in claim 38, further comprising:

determining which media components of the multimedia message need transcoding based at least on the respective received media characteristics; and

transmitting to a transcoding server at least the media components of the multimedia message that need transcoding.

42. (Previously presented) A method as in claim 38, further comprising:

transcoding a media component of the multimedia message based at least on the actual or assumed multimedia capabilities of the receiving terminal.

Claims 43-47. (canceled)

48. (Previously presented) An apparatus, comprising:

means for receiving media characteristics of a multimedia message that are inserted in a field of the multimedia message, wherein the media characteristics of the multimedia message comprise at least one of the following: a number of frames, or a sampling rate of audio content, wherein the multimedia message has a header portion and a body portion, and the media characteristics of the multimedia message are inserted into a field in the header portion of the multimedia message; and

means for determining whether the multimedia message should be transcoded based on a comparison of the media characteristics of the multimedia message and actual or assumed multimedia capabilities of a receiving terminal.

IX. **EVIDENCE APPENDIX 37 C.F.R. §41.37(c)(1)(ix)**

No Evidence Appendix.

X. **RELATED PROCEEDINGS APPENDIX 37 C.F.R. §41.37(c)(1)(x)**

None.